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09/480,676	01/11/2000	Justin Che-I Chuang	112063	4609

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EXAMINER

SMITH, SHEILA B

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 06/19/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/480,676

Applicant(s)

CHUANG ET AL.

Examiner

Sheila B. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22,24,25,27-31 and 34-53 is/are pending in the application.
- 4a) Of the above claim(s) 23,26,32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 22,24,25,27-31 and 34-53 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 22, 24, 25, 27-29³⁰, 44, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen et al. (U. S. Patent number 5,802,465) in view of Blakeney, 11 et al. (U. S. Patent number 5,267,261) and further in view of D'Avello (U.S. Patent Number 5,963,848).

Regarding claim 22, Hamalainen discloses essentially all the claimed invention as set forth in the instant application, further Hamalainen discloses a data transmission in a radio telephone network for bidirectional transmission of packet data. Hamalainen further discloses the radio telephone network including a plurality of base stations, mobile stations (column 1, lines 13-33). Furthermore, Hamalainen discloses the wireless station receives a paging message when a data Packet is pending for downlink transmission to the wireless station (column 8, lines 63-67). However, Hamalainen does not disclose expressly the (a) detecting of a plurality of pilot frequency signals at the wireless station or generating a list of preferred traffic channels based on detected levels of the pilot frequency signals and (b) the base station further configured to receive a list of preferred traffic channels generated by the wireless station based on detected levels of the pilot frequency signals at the wireless station.

In the same field of endeavor, Blakeney discloses a Mobile station assisted soft handoff in a CDMA cellular communications system. Blakeney further discloses the monitoring of the

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pilot signals by the mobile stations (abstract), the generating of a list of preferred traffic channels (system resources) based on detected levels of the pilot frequency signals and transmitting the list to the base station.

And further in the same field of endeavor, D'Avello discloses a method and apparatus for assigning a channel to a mobile unit in a wireless communication system. D'Avello further discloses the base station further configured to receive a list of preferred traffic channels generated by the wireless station based on detected levels of the pilot frequency signals at the wireless station which reads on column 5 lines 47-60.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Hamalainen with the mobile assisted soft handoff in a CDMA cellular communications system and the base station further configured to receive a list of preferred traffic channels generated by the wireless station based on detected levels of the pilot frequency signals at the wireless station for the purpose of selecting a channel with a better signal strength than the current one.

Regarding claims, 44, 45, Hamalainen discloses everything claimed, as applied above (see claim 22)however, Hamalainen fails to specifically disclose the wireless station transmits the list of preferred traffic channels to the base station.

In the same field of endeavor, Blakeney discloses a Mobile station assisted soft handoff in a CDMA cellular communications system. Blakeney further discloses the generating of a list of preferred traffic channels (system resources) based on detected levels of the pilot frequency signals and transmitting the list to the base station (abstract).

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Hamalainen with the mobile assisted soft handoff in a CDMA cellular communications system of Blakeney to obtain the invention as specified in claim 22. for the purpose of selecting a channel with a better signal strength than the current one.

Regarding claims 24,25,27,28, 29,, Hamalainen discloses everything claimed, as applied above (see claim 22), Hamalainen further discloses the traffic channel assignment and the receiving of the data packet at the wireless station using the assigned downlink traffic channel (column 8, lines 1-20).

Regarding claims 30,, the using of frames in a superframe is well known in the packet switching technology and the Examiner takes official notice of such, therefore it would have been obvious for a person skilled in the art at the time the invention was made to use one of the frames in a predetermined number of frames in a superframe. The motivation for doing so would have been to conform to a known standard.

2. Claims 34-³⁹~~40~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen et al. (U.S. Patent number 5,640,395) in view of Koohgoli et al. (U.S. Patent number 5,497,505).

Regarding claims 34 - 39, Hamalainen discloses a system for transmitting packet data in digital cellular time division multiple access (TDMA) air interface. Hamalainen further discloses the radio telephone network including a plurality of base stations, mobile stations (column 2, lines 29-44). Furthermore, Hamalainen discloses the wireless station receives a paging message when a data packet is pending for downlink transmission to the wireless station (column 2, lines 58-65). However, Hamalainen does not disclose expressly the(a) receiving of a list of preferred

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traffic channels for the wireless station at the base station, and (b) a pilot frequency signal scanner for scanning a frequency in response to the paging message.

In the same field of endeavor, Koohgoli discloses a call set-up and spectrum sharing in radio communication on systems with dynamic channel allocation. Koohgoli further discloses the (a) base station receives a list of preferred traffic channels (column 3 ,lines 24-30), and (b) a pilot frequency signal scanner for scanning a frequency in response to the paging message (column 7 ,lines 43-55).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Hamalainen with the call set-up of and a pilot frequency signal scanner for scanning a frequency in response to the paging message, for the purpose of dynamically assigning channels to mobile terminals.

3. ***Claims 40-42,46-52*** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen et al. (U. S. Patent number 5,802,465), Blakeney, II et al. (U. S. Patent number 5,267,261), and in further view of Gunmar (U.S. Patent number 5,507,007).

Regarding claims 40-42, 46- 52, Hamalainen discloses As to claim 22, Hamalainen, in view of Blakeney, disclose everything as claimed above. However the combination fails to disclose the generating of a preferred traffic channel priority order list for the wireless station at the base station and the updating the preferred traffic channel priority order list.

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In the same field of endeavor, Gunmar discloses a method of distributing capacity in a radio cell system. Gunmar further discloses the step of determining the list of preferred traffic channels according to a priority order (column 1, lines 48-67; column 2, lines 1-17).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Hamalainen with Gunmar to obtain the invention as specified in claim 34, for the purpose of achieving traffic handling with an efficient utilization of the radio frequencies.

Response to Arguments

2. Applicant's arguments with respect to claims 22,34,25,27-31,34-53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (703)305-0104. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 703-305-4778. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)308-6296 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-9700.

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SS

S. Smith

June 16, 2003

Eric G. ...
PATENT EXAMINER